

REMARKS/ARGUMENTS

I. General Remarks

Applicants respectfully request that the above amendments be entered, and further request reconsideration in light of the amendments and remarks contained herein. Applicants thank the Examiner for his careful consideration of this application.

II. Disposition of the Claims

Claims 1-38 are pending in this application. Claims 39-68 are canceled in response to a restriction requirement, and claims 7 and 11-38 are withdrawn.

Claims 1, 3, 5, and 6 have been amended herein. Applicants respectfully submit that these amendments add no new matter to the application and are supported by the specification as originally filed. All the above amendments are made in a good faith effort to advance the prosecution on the merits of this case.

Claims 1-38 stand rejected under the judicially created doctrine of nonstatutory double patenting. Claims 1-6 and 8-10 also stand rejected under 35 U.S.C. § 102(b).

III. Remarks Regarding Restriction/Election Requirement

During a telephone conference with the Examiner on June 3, 2006, Applicants made a provisional election without traverse to prosecute the invention of Group I claims 1-38, and the species of hydrophobically modified polymer with chitosan and alkali halide as the species for the hydrophilic polymer and hydrophobic compound, respectively. Affirmation of these elections is hereby made. Accordingly, Applicants have canceled claims 39-68, have withdrawn claims 7 and 11-38, and identify claims 1-6 and 8-10 as falling within the elected species. Applicants reserve the right to pursue these claims as filed in a divisional or other continuing application.

IV. Remarks Regarding Nonstatutory Double Patenting Rejections

A. Nonstatutory Double Patenting Rejection over U.S. Patent 6,476,179

Claims 1-18 and 36-38 stand rejected on the ground of nonstatutory double patenting over claims 1-3, 6-8, 13-15, and 17-19 of U.S. Patent No. 6,476,179 issued to Ito *et al.* (hereinafter *Ito*). With respect to this rejection, the Office Action states:

The subject matter covered in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: the claims in both patents are drawn to a method of

treating a subterranean formation to alter the permeability of the formation by introducing a hydrophobically-modified hydrophilic polymer as an relative permeability modifier (RPM).

(Office Action at 7.) Applicants respectfully disagree because claims 11-18 and 36-38 of the present application are patentable over claims 1-3, 6-8, 13-15, and 17-19 of *Ito*. See *Manual of Patent Examining Procedure* § 804 (8th ed., rev. 4, Oct. 2005) (hereinafter "MPEP").

The standard for a double patenting rejection is whether the claim in the application is an obvious variation of an invention claimed in the patent. See MPEP § 804(B)(1). This double patenting analysis is confined to a comparison to the claims in the patent, and not to use of the disclosure of the patent as prior art. See MPEP § 804(III). However, the claims of *Ito* do not teach or suggest a method of reducing the permeability of a subterranean formation to aqueous-based fluids, as recited in Applicants' claims. Nothing in the claims of *Ito* suggests anything remotely related to Applicants' claims. *Ito* appears to be directed to methods of producing a starting material for polycarbonate resin production, whereas Applicants' claims are directed to methods of reducing the permeability of a subterranean formation to aqueous-based fluids. Accordingly, Applicants respectfully submit that Applicants' claims are not obvious over the cited claims of *Ito*, and respectfully request the removal of these rejections with respect to claims 1-18 and 36-38. In the event that *Ito* has been cited in error and in the event that the Examiner actually intended to cite another patent against Applicants, Applicants respectfully request that the non-final Office Action be withdrawn and reissued with a revised rejection statement and that the time for reply be reset.

V. Provisional Nonstatutory Double Patenting Rejection over U.S. Patent Application Nos. 10/612,271, 10/780,995, and 10/825,001.

Certain claims stand rejected under the judicially created doctrine of nonstatutory double patenting over co-pending Application Nos. 10/612,271, 10/780,995, and 10/825,001. (Office Action at 7-9.) Submitted herewith is an appropriate terminal disclaimer in compliance with 37 C.F.R. § 1.321 disclaiming the appropriate term. Accordingly, Applicants respectfully submit that the double patenting rejections have been overcome, and respectfully request the withdrawal of these rejections.

VI. Remarks Regarding Rejection of Claims under 35 U.S.C. § 102(b)

Claims 1-6 and 8-10 are rejected under 35 U.S.C. § 102(b) as being anticipated by PCT Application Publication WO 03/056130 A1 by Couillet *et al.* (hereinafter "*Couillet*"). With respect to this rejection, the Examiner states that:

Couillet discloses a method for fracturing/treating a subterranean formation to substantially alter the fluid flow (permeability) and/or surface characteristics of the formation, said method including introducing into the formation an aqueous fracturing viscoelastic composition containing a water-soluble hydrophobically-modified polymer having hydrophobic chains of approximately 12-24 carbons and a molecular weight between 10,000 and 10,000,000 g/mol.

(Office Action at 9.) Applicants respectfully disagree with these rejections because *Couillet* does not constitute prior art under § 102(b), and *Couillet* does not anticipate Applicants' claims.

A. *Couillet* Does Not Constitute Prior Art Under 35 U.S.C. § 102(b)

In order for a reference to constitute prior art under 35 U.S.C. § 102(b), "the invention must be patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States." See MPEP § 2131, emphasis added.

As *Couillet* was published on July 10, 2003, which is less than one year prior to the filing date of the present application (March 23, 2004), *Couillet* does not constitute prior art under 35 U.S.C. § 102(b). Thus, the rejection of claims over *Couillet* under § 102(b) is improper.

B. *Couillet* Does Not Teach Every Element of Claims 1-6 and 8-10.

In order to form a basis for a rejection under 35 U.S.C. § 102, a prior art reference must disclose each and every element as set forth in the claim. MANUAL OF PATENT EXAMINING PROCEDURE § 2131 (2005). However, *Couillet* does not disclose "allowing the water-soluble relative permeability modifier to interact with the subterranean formation thereby reducing the permeability of the of a subterranean formation to aqueous-based fluids," as recited in Applicants' independent claim 1. Rather *Couillet* provides that:

The hydrophobically-modified polymer and, notably, pendant hydrophobic chains of said polymer, interact with the surfactant micelles. As a result, a viscoelastic gel structure is created. . . said fluid however remaining responsive to hydrocarbons due to the

fact that, preferentially, the polymer concentration is not sufficient to form an entangled gel network.

Couillet page 5, lines 4-13 (emphasis added). This does not disclose or suggest any effect on the permeability of the subterranean formation to aqueous-based fluids. Thus, *Couillet* does not disclose every element of independent claim 1. Therefore, Applicants respectfully assert that independent claim 1 is not anticipated by *Couillet*.

C. *Couillet* Does Not Disclose Every Element of Claims 1-6 and 8-10 with “Sufficient Specificity.”

As stated above, in order to form a basis for a rejection under 35 U.S.C. § 102, a prior art reference must disclose each and every element as set forth in the claim. MANUAL OF PATENT EXAMINING PROCEDURE § 2131 (2005). Moreover, when a prior art reference discloses a numerical range that touches or overlaps the claimed range, the reference must disclose the claimed range with “sufficient specificity to constitute an anticipation under the statute.” *Id.* at § 2131.03 (II). This question of “sufficient specificity” is fact dependent, and is similar to that of whether a person of ordinary skill in the art could “clearly envisage” a species from a generic teaching. *Id.*; *see id.* at § 2131.02 (citing *In re Petering*, 301 F.2d 676 (CCPA 1962) (disclosure of a generic chemical formula, without more, cannot anticipate a specific compound having that formula where “the generic formula encompass[es] a vast number and perhaps even an infinite number of compounds”)). Applicants respectfully assert that *Couillet* does not anticipate Applicants’ invention under 35 U.S.C. § 102 because it does not disclose certain elements of claims 1-6 and 8-10 with sufficient specificity.

Couillet discloses “an aqueous viscoelastic fracturing fluid for use in the recovery of hydrocarbons.” *Couillet*, page 4, lines 20-21 (emphasis added). However, this generic teaching of a fluid for use in the recovery of hydrocarbons does not disclose a method of reducing permeability of a subterranean fluid to aqueous-based fluids during the drilling phase with “sufficient specificity” to anticipate Applicants’ claims. Nowhere does *Couillet* teach or suggest to where a person of ordinary skill in the art would “at once envisage” a water soluble relative permeability modifier that comprises a hydrophobically modified polymer capable of reducing the permeability of a subterranean formation to aqueous based fluids during the drilling phase. *See* MANUAL OF PATENT EXAMINING PROCEDURE § 2131.02 (2005). Thus, *Couillet*’s generic disclosure does not disclose every element in claims 1-6 and 8-10 with sufficient specificity to anticipate those claims.

Therefore, Applicants respectfully assert that independent claim 1 is not anticipated by *Couillet*. Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. § 102(b) rejections as to independent claim 1 and its dependents, claims 2-6 and 8-10.

VII. No Waiver

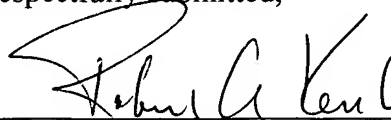
All of Applicants' arguments are without prejudice or disclaimer. Additionally, Applicants have merely discussed example distinctions from the cited references. Other distinctions may exist, and Applicants reserve the right to discuss these additional distinctions in a later Response or on Appeal, if appropriate. By not responding to additional statements made by the Examiner, Applicants do not acquiesce to the Examiner's additional statements, such as, for example, any statements relating to what would be obvious to a person of ordinary skill in the art. The example distinctions discussed by Applicants is sufficient to overcome the double patenting and anticipation rejections.

SUMMARY

In light of the above remarks, Applicants respectfully submit that the application is now in condition for allowance, and earnestly solicit timely notice of the same. Should the Examiner have any questions, comments or suggestions in furtherance of the prosecution of this application, the Examiner is invited to contact the attorney of record by telephone, facsimile, or electronic mail.

The Commissioner is hereby authorized to debit the Deposit Account of Halliburton Energy Services, Inc., No. 08-0300 in the amount of \$130.00 for the terminal disclaimer fee under 37 C.F.R. § 1.20(d). Should the Commissioner deem that any additional fees are due, including any fees for extensions of time, Applicant respectfully requests that the Commissioner accept this as a Petition Therefor, and directs that any additional fees be charged to the Deposit Account of Halliburton Energy Services, Inc., No. 08-0300.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Robert A. Kent", written over a horizontal line.

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